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THE PLANT DISEASE REPORTER

Issued By

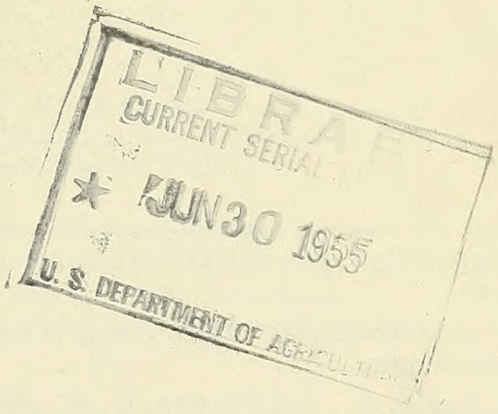
PLANT DISEASE EPIDEMICS
and
IDENTIFICATION SECTION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

CHECK LIST OF THE DISEASES OF GRASSES AND CEREALS IN ALASKA[1]

Supplement 232 May 30, 1955



The Plant Disease Reporter is issued as a service to plant pathologists throughout the United States. It contains reports, summaries, observations, and comments submitted voluntarily by qualified observers. These reports often are in the form of suggestions, queries, and opinions, frequently purely tentative, offered for consideration or discussion rather than as matters of established fact. In accepting and publishing this material the Plant Disease Epidemics and Identification Section serves merely as an informational clearing house. It does not assume responsibility for the subject matter.

THE PLANT DISEASE REPORTER

PLANT DISEASE EPIDEMICS AND IDENTIFICATION SECTION

Horticultural Crops Research Branch Plant Industry Station, Beltsville, Maryland

CHECK LIST OF THE DISEASES OF GRASSES AND CEREALS IN ALASKA[1]

Roderick Sprague[2]

Plant Disease Reporter
Supplement 232

May 30, 1955

In the three years since a check list of the diseases of Gramineae for all western states and the territory of Alaska was issued[3] the number of citations (host x fungi) for Alaska has increased from 49 to 311. Since it will be several years before a general revision of the list will be needed it seems desirable to separately issue one for Alaska because of the present inadequacy of that part of our list. The increase by over sixfold in Alaskan citations resulted from issuance of Cash's detailed check list[4] of all hosts including Gramineae for the whole territory plus a series of articles by the writer on fungi collected in 1952 in the region.[5]

In the list which follows only parasitic fungi and some associated forms are included. Some early invaders of necrotic tissue which may be encountered such as Hendersonia crastophila Sacc. are included. Some of the saprophytic ascomycetes are excluded. The well known Mycosphaerella tassiana, for instance, is now generally recognized as only the ascigerous stage of a saprophytic mold. That is, the organism which we learned as M. tulasnei is part of the life cycle of a common saprophytic species of Cladosporium. A number of other similar forms however are included because of their uncertain parasitic nature. For the sake of completeness they are added here for the time being at least. In Alaska ascigerous forms are favored, sometimes to the exclusion of the conidial stages. Therefore any perithecial form may be suspect unless its saprophytic nature is well known.

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[1] Scientific Paper no. 1395, Washington Agricultural Experiment Stations, Pullman. Project No. 449.

[2] Plant Pathologist, State College of Washington, Tree Fruit Experiment Station, Wenatchee, Washington.

[3] Sprague, R., and Fischer, G. W. 1952. Check list of the diseases of grasses and cereals in the Western United States and Alaska. Washington Agr. Exp. Sta. Circ. 194.

[4] Cash, Edith K. 1953. A check list of Alaskan fungi. U. S. Department of Agriculture Plant Disease Reptr. Suppl. 219.

[5] Sprague, R. 1954, 1955. Some leafspot fungi on western Gramineae--VII. Mycologia 46: 76-88. 1954. Ibid--VIII. Mycologia 47: in press.

AGROPYRON LATIGLUME (Scribn. & Sm.) Rydb.
Ascochyta sorghi Sacc., Mile 245 on Richardson Highway.
Erysiphe graminis Mérat, Copper Center.
Scolecotrichum graminis Fckl., Richardson Highway; Muir's Camp[6]; Goose Cove[6].
Stagonospora simplicior Sacc. & Berl., near Russell Is.[6] (Cooper Sta. 26).
AGROPYRON MICHNOI Roshev
Heterosporium phlei Gregory, Matanuska.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Matanuska.
AGROPYRON REPENS (L.) Beauv.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Sebree Is.[6]
Scolecotrichum graminis Fckl., Sebree Is.; Muir's Camp.
AGROPYRON SERICEUM Hitchc.
Erysiphe graminis Mérat, Fairbanks.
Scolecotrichum graminis Fckl., Fairbanks.
AGROPYRON SPICATUM (Pursh) Scribn. & Sm.
Ascochyta sorghi Sacc., Mile 15 s. of Circle.
AGROPYRON SUBSECUNDUM (Lk.) Hitchc.
Helminthosporium tritici-repentis Died.; Windfall Lake (Tongass Natl. Forest).
Puccinia rubigo-vera (DC.) Wint., Sandy Cove[6]..
Rhynchosporium orthosporum Caldwell, Sandy Cove; Yankee Basin (Tongass Natl. Forest).
R. secalis (Oud.) J. J. Davis, Yankee Basin near Mendenhall Glacier.
Septogloeum oxysporum Sacc., Bomm. & Rouss., Eagle River; Sandy Cove.
AGROPYRON TRACHYCAULUM (Lk.) Malte
Acremoniella sp., Tlingit Point[6].
Claviceps purpurea (Fr.) Tul., near Russell Is.
Heterosporium phlei Gregory, Kenai.
Ophiobolus graminis Sacc., Sandy Cove.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Homer.
Rhynchosporium secalis (Oud.) J. J. Davis, Homer.
Scolecotrichum graminis Fckl., Beartrack Cove[6]; Fairbanks; Homer; Goose Cove; Matanuska; Muir's Camp; Sandy Cove.
Selenophoma donacis var. stomáticola (Bauml.) Sprague & A. G. Johnson, Homer.
Stagonospora simplicior Berl. & Sacc., near Russell Is.
Urocystis agropyri (Preuss) Schroeter, Homer.

AGROSTIS AEQUIVALVIS (Trin.) Trin.
Helminthosporium stenacrum Drechsl., Herbert River Valley.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Auk Village.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Herbert River Valley.
Periconia sp., Bartlett Cove[6].
Septogloeum oxysporum Sacc., Bomm. & Rouss., Herbert River Valley.
AGROSTIS BOREALIS Hartm.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Mt. Gastineau.
Pyrenochaeta terrestris (Hans.) Gorenz., Walker & Larson, in raw soil near Mendenhall Glacier.
Septoria avenae Frank, Mt. Gastineau.
AGROSTIS EXARATA Trin.
Claviceps purpurea (Fr.) Tul., Craig.
Darluca filum (Biv.) Cast., on rust. Anchorage Cove[6].
Erysiphe graminis Mérat, Sitka; Mendenhall River Valley.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Mendenhall River Valley; Yankee Basin
Ophiobolus graminis Sacc., Mendenhall River Valley.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Herbert River Valley; Eagle River; s. f. Eagle River; Sandy Cove.

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[6]In Glacier Bay National Monument. See footnote 5 above.

Puccinia graminis Pers., Anchorage Cove.
Rhynchosporium orthosporum Caldwell, Mendenhall Glacier area.
Septoria avenae Frank, s. f. Eagle River; Beartrack Cove.
S. calamagrostidis (Lib.) Sacc., Beartrack Cove; Sitka.

AGROSTIS SCABRA Var. GEMINATA (Trin.) Swallen.
Ascochyta sorghi Sac., Red Mountain (Glacier Bay).
Mycosphaerella ignobilis (Auers.) Maire & Werner, (probably saprophytic). Nagai.
Rhizoctonia solani Kuehn, s. f. Eagle River.
Septoria calamagrostidis (Lib.) Sacc., Yes Bay; Sitka.
Typhula sp., Red Mountain [7].

AGROSTIS STOLONIFERA L.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Herbert River Valley.

AGROSTIS sp.
Helminthosporium erythrospilum Drechsl., Ketchikan.
Puccinia graminis Pers., Cordova.
Sphaerella californica Cke. & Hark; probably saprophytic). Yes Bay.

ALOPECURUS AEQUALIS Sobol.
Scolecotrichum graminis Fckl., Fairbanks.

ALOPECURUS ALPINUS J. E. Smith.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Homer.

ARCTAGROSTIS LATIFOLIA (R. Br.) Griseb.
Apiospora parallela (Karst.) Sacc., (probably saprophytic). Kotzebue.
Claviceps purpurea (Fr.) Tul., Berg; Kenai.
Darluca filum (Biv.) Cast. on rust. Mt. McKinley Natl. Park.
Heterosporium phlei Gregory, Nome.
Mycosphaerella recutita (Fr.) Johans., (probably saprophytic). Icy Reef.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., St. Mathews Is.
Puccinia pygmaea Eriks., Nome; Glenn Highway.
Scolecotrichum graminis Fckl., Homer.
Selenophoma everhartii (Sacc. & Syd.) Sprague & A. G. Johnson, St. Mathews Is.
Ustilago striiformis (West.) Niessl, Unalakleet.

ARCTAGROSTIS LATIFOLIA var. ARUNDINACEA (Trin.) Griseb.
Hendersonia crastophila Sacc., Naknek.
Puccinia pygmaea Eriks., Nome; Alaska Highway.

ARCTOPHILA FULVA (Trin.) Rupr. (Colpodium).
Claviceps purpurea (Fr.) Tul., Circle.
Mycosphaerella pusilla (Auers.) Johans., Preobraschenie Is.
Pleospora macrospora Schroet., (probably saprophytic). Preobraschenie Is.; Camden Bay.

AVENA SATIVA L.
Helminthosporium avenae Eidam, Sitka.
Ustilago avenae (Pers.) Rostr., Fairbanks; Sitka.
U. hordei (Pers.) Lagerh., Palmer; Fairbanks; Matanuska.

BECKMANNIA SYZIGACHNE (Steud.) Fern.
Erysiphe graminis Mérat, Fairbanks.

BROMUS ALEUTENSIS Trin.
Fusarium nivale (Fr.) Ces., Unalaska Is.
Hendersonia culmicola Sacc., Unalaska Is.

BROMUS ARCTICUS [8]
Puccinia coronata Corda, Anchorage.

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[7] Loc. cit., footnote 5

[8] This host is not listed in either Anderson's Flora of Alaska (Iowa State College Jour. Sci.) or Hitchcock's Manual of the grasses of the United States. U. S. D. A. Misc. Publ. 200.

BROMUS CILIATUS L.
Puccinia coronata Corda, Anchorage.
Rhynchosporium secalis (Oud.) J. J. Davis, Homer.
BROMUS INERMIS Leyss
Heterosporium phlei Gregory, Anchorage.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Anchorage.
Mycosphaerella recutita (Fr.) Johans., (probably saprophytic). Near Fairbanks.
Puccinia coronata Corda, Anchorage.
Selenophoma bromigena (Sacc.) Sprague & A. G. Johnson, Fairbanks; College.
BROMUS PUMPELLIANUS Scribn.
Stagonospora bromi A. L. Sm. & Ramsb., College.
BROMUS SECALINUS L.
Mycosphaerella longissima (Fckl.) Lind, (probably saprophytic). Sitka.
BROMUS SITCHENSIS Trin.
Erysiphe graminis Mérat, Hoonah.
Septoria jaculella Sprague, Hoonah.
BROMUS sp. (and hybrids)
Heterosporium phlei Gregory, Matanuska.

CALAMAGROSTIS CANADENSIS var. SCABRA (Presl) Hitchc.
Acremoniella sp., Herbert River Valley.
Claviceps purpurea (Fr.) Tul., Haines; Sitka.
Coniothyrium psammae Oud., Unalaska Is.
Darluca filum (Biv.) Cast., Unalaska Is.
Fusarium nivale (Fr.) Ces., Juneau; Mendenhall River Valley.
Hadrotrichum linearis Pk., Sitka.
Hendersonia crastophila Sacc., Seward; Unalaska Is.
H. culmicola var. minor Sacc., Seward; Wasilla.
Heterosporium phlei Gregory, Unalakleet; Wasilla.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Beartrack Cove; Anchorage; Mt. McKinley Natl. Park; Red Mountain, Unalakleet; Wasilla.
Mycelia sterilia, on roots, in raw soil. Near Mendenhall Glacier.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Yankee Basin trail.
Phyllachora graminis (Fr.) Fckl., Sitka.
Puccinia coronata Corda, College; Tlingit Point; Unalaska Is.; Wiseman.
Rhynchosporium orthosporum Caldwell, Auk Lake; Herbert River Valley; Mendenhall River Valley; Montana Creek (near Mendenhall area); Yankee Basin; Mt. Gastineau.
Sclerotium rhizodes Auers., Homer.
Scolecotrichum graminis Fckl., Auk Village; Herbert River Valley; near Herbert Glacier; Mendenhall Glacier area.
Selenophoma everhartii (Sacc. & Syd.) Sprague & A. G. Johnson, Mt. Gastineau.
Septogloeum oxysporum Sacc., Bomm. & Rouss., Mt. McKinley; Unalakleet.
Septoria arctica Berk. & Curt., Sitka.
S. avenae Frank, Herbert River Valley.
Ustilago calamagrostidis (Fckl.) Clinton; Unalakleet.
U. striiformis (West.) Niessl, Homer; Yankee Basin; Herbert River Valley; Mt. Gastineau.
CALAMAGROSTIS NUTKAENSIS (Presl) Steud.
Claviceps purpurea (Fr.) Tul., Ketchikan; Sitka.
Colletotrichum graminicola (Ces.) G. W. Wils., Tatalina; north of Fairbanks.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Thum Bay.
Puccinia pygmaea Eriks., Sitka.
Septoria arctica Berk. & Curt., Sitka.
CALAMAGROSTIS PURPURASCENS R. Br.
Colletotrichum graminicola (Ces.) G. W. Wils., Mt. McKinley Natl. Park.

CINNA LATIFOLIA (Trevir) Griseb.
Hendersonia crastophila Sacc., Tlingit Point[9]
Undetermined leafspot, Tlingit Point.

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[9]Loc. cit. footnote 5.

DACTYLIS GLOMERATA L.
Claviceps purpurea (Fr.) Tul., Sitka.

DESCHAMPSIA ATROPURPUREA (Wahl.) Scheele
Bends, cause undet, Mendenhall River Valley.
Mycosphaerella deschampsiae Sprague, Mendenhall River Valley; Red Mountain.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Mendenhall River Valley; Red Mountain; Yankee Basin.
Puccinia poae-sudeticae (West.) Jørstd. f. airae (Lagerh.) Eagle River.
Stagonospora graminum Sacc. & Scalia, Illiuliuk.
DESCHAMPSIA BERINGENSIS Hult.
Curvularia geniculata (Tracy & Earle) Boed., St. Mathews Is.
Selenophoma everhartii (Sacc. & Syd.) Sprague & A. G. Johnson, St. Mathews Is.
Stagonospora vexatula Sacc., St. Mathews Is.
DESCHAMPSIA CAESPITOSA (L.) Beauv.
Colletotrichum graminicola (Ces.) G. W. Wils., Near Juneau airport.
Ophiobolus graminis Sacc., Old lake bed near Mendenhall Glacier.
Stagonospora vexatula Sacc., Yankee Basin.
Tilletia cerebrina Ell. & Ev., Kodiak Is.

DUPONTIA FISCHERI R. Br.
Septoria arctica Berk. & Curt. Bering Sea.
DUPONTIA FISCHERI R. Br. ssp. PSILOSANTHA (Rupr.) Hult.
Selenophoma everhartii (Sacc. & Syd.) Sprague & A. G. Johnson, St. Mathews Is.

ELYMUS INNOVATUS Beal
Helminthosporium tritici-repentis Died., Mt. McKinley Natl. Park.
ELYMUS JUNCEUS Fisch.
Erysiphe graminis Mérat, Matanuska.
Heterosporium phlei Gregory, Matanuska.
Stagonospora arenaria Sacc., Matanuska.
ELYMUS MOLLIS Trin.
Claviceps purpurea (Fr.) Tul., Chatham; Haines; Homer; Admiralty Is.; Kenai; Ivanof Bay; Unalakleet; Valdez; Sitka; Bartlett Cove; Beartrack Cove; Sebree Is.; Strawberry Is.; Common along the beaches.
Colletotrichum graminicola (Ces.) G. W. Wils., Beartrack Cove.
Puccinia rubigo-vera (DC.) Wint., Sitka.
Scolecotrichum graminis Fckl., Auk Village Recreation Area.
Septoria agropyrina Lobik, Auk Village Recreation Area.
S. pacifica Sprague, Beartrack Cove.
Stagonospora arenaria Sacc., Seward.
ELYMUS VIRESCENS Piper
Puccinia rubigo-vera (DC.) Wint., Sitka.

FESTUCA ALTAICA Trin.
Heterosporium phlei Gregory, Homer.
Phaeoseptoria festucae Sprague, Eagle Summit.
Puccinia festucae (DC.) Plowr., Homer.
FESTUCA ELATIOR L.
Phleospora idahoensis Sprague (Phoma sp.), material collected in s. e. Alaska by C. L. Lefebvre.
FESTUCA OVINA var. BRACHYPHYLLA (Schult.) Piper
Fusarium acuminatum Ell. & Ev., Mendenhall Glacier area.
F. nivale (Fr.) Ces., Mendenhall River Valley.
Hendersonia culmicola Sacc., Mt. Gastineau.
Ophiobolus graminis Sacc., Near Mendenhall Glacier.
Puccinia crandallii Pam. & Hume, Mt. Gastineau; Mendenhall River Valley.
Pythium debaryanum Hesse, raw soil near Mendenhall Glacier.
Septoria tenella Cooke & Ell., s. f. Eagle River.
Spermospora subulata (Sprague) Sprague, Mendenhall Glacier area.

FESTUCA RUBRA L.
Claviceps purpurea (Fr.) Tul., Unalakleet.
Fusarium avenaceum (Fr.) Sacc., Mendenhall River Valley.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Homer; Herbert River Valley; Sandy Cove; Bartlett Cove.
Phleospora idahoensis Sprague (Phoma sp.), material collected in s. e. Alaska by C. L. Lefbvre; Mendenhall River Valley.
Septoria tenella Cooke & Ell., Sandy Cove.
Spermospora subulata (Sprague) Sprague, Beartrack Cove.
Vermicularia sp., Bartlett Cove.

FESTUCA RUBRA var. LANUGINOSA Mert. & Koch
Heterosporium phlei Gregory, Kenai.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Homer.
Puccinia cockerelliana Bethel, Kenai.

FESTUCA RUBRA var. PROLIFERA Piper
Septoria tenella Cooke & Ell., Tlingit Point.

GLYCERIA BOREALIS (Nash) Batch.
Fusarium nivale (Fr.) Ces., Juneau.
Hendersonia crastophila Sacc., Juneau.

GLYCERIA PAUCIFLORA Presl
Claviceps purpurea (Fr.) Tul., Ketchikan.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Eagle River; Herbert River Valley; Yankee Basin.
Chlorotic leaf ribboning, possibly frost induced, on trail to Windfall Lake.

HIEROCHLOE ALPINA (Schwartz) Roem.
Hendersonia crastophila Sacc., Mt. Gastineau.
Pleospora trichostoma (Fr.) Ces. & de Not., Mt. Gastineau; Red Mountain; Kotzebue.

HIEROCHLOE PAUCIFLORA R. Br.
Pleospora karstenii Berl. & Vogl., Camden.

HORDEUM BRACHYANTHERUM Nevski
Ascochyta sorghi Sacc., Funter.
Claviceps purpurea (Fr.) Tul., Sitka; Kenai.
Erysiphe graminis Mérat, Hoonah; Valdez.
Fusarium avenaceum (Fr.) Sacc., Bartlett Cove.
F. acuminatum Ell. & Ev., Bartlett Cove.
F. equiseti Corda) Sacc., Bartlett Cove.
F. nivale (Fr.) Ces., Douglas.
Helminthosporium teres Eidam, Bartlett Cove; Near Russell Is.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Sandy Cove; Bartlett Cove.
Phaeoseptoria festucae Sprague, Tlingit Point.
Puccinia pygmaea Eriks., Cordova.
Scolecotrichum graminis Fckl., Kenai.
Septogloeum oxysporum Sacc., Bomm. & Rouss., Sandy Cove.
Septoria nodorum Berk., Beartrack Cove; Bartlett Cove; Sebree Is.
S. passerinii Sacc., Herbert River Valley; Sandy Cove.

HORDEUM JUBATUM L.
Scolecotrichum graminis Fckl., Berg; Circle; Fairbanks.
Ustilago bullata Berk., Circle; Rampart.

HORDEUM VULGARE L.
Helminthosporium gramineum Rab., Fairbanks; Matanuska; Wasilla
Scolecotrichum graminis Fckl., Matanuska.
Ustilago hordei (Pers.) Lagerh., Matanuska.
U. nuda (Jens.) Rostr., Matanuska.

HORDEUM sp.
Heterosporium hordei Bub., Matanuska.

PHALARIS ARUNDINACEA var. PICTA L.
Fusarium nivale (Fr.) Ces., Juneau
Colletotrichum graminicola (Ces.) Wils., Juneau.

PHLEUM ALPINUM L.
Darluca filum (Biv.) Cast., on rust. Juneau.
Fusarium acuminatum Ell. & Ev., near Mendenhall Glacier.
Heterosporium phlei Gregory, Cooper Sta. 26 near Russell Is.; Red Mountain; Near Mendenhall Glacier.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Mt. Gastineau; Mendenhall River Valley.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Tlingit Pt.
Puccinia poae-sudeticae (West.) Jørstd., Tunnel 13; Homer; Juneau; Tlingit Point; Near Mendenhall Glacier.
Pythium debaryanum Hesse, Near Mendenhall Glacier.
Scolecotrichum graminis Fckl., Homer; Strawberry Is.; Sandy Cove; Red Mountain; Muir's Camp; Mendenhall River Valley.

PHLEUM PRATENSE L.
Claviceps purpurea (Fr.) Tul., Sitka.
Scolecotrichum graminis Fckl., Homer.
Selenophoma donacis var. stomaticola (Bauml.) Sprague & A. G. Johnson, Ketchikan.

POA ALPINA L.
Cylindrocarpon ehrenbergii Wr., near Russell Is.
Darluca filum (Biv.) Cast., on rust. Mendenhall Glacier area; Muir's Camp; Cooper Sta. 33 in Hugh Miller's Inlet; Near Herbert Glacier.
Fusarium avenaceum (Fr.) Sacc., Cooper Sta. 33.
F. nivale (Fr.) Ces., Muir's Camp.
Puccinia poae-sudeticae (West.) Jørstd., Casement Glacier area; Muir's Camp; Cooper Sta. 33 in Hugh Miller's Inlet; Mendenhall Glacier area; Goose Cove; Anchorage Cove; Red Mountain; Near Russell Is.; Herbert Glacier area; Steep Creek; Muir Is.; Mt. Gastineau; Common near glaciers in s. e. Alaska.
Septoria oudemansii Sacc., Muir's Camp.

POA ANNUA L.
Botrytis cinerea Am. Auct., Juneau.
Entyloma dactylidis (Pass.) Cif., Muir Is.
Hendersonia crastophila Sacc., Hoonah.
Leptosphaeria muirensis Sprague, Muir Is.; Auk Village Recreation Area.
Septoria macropoda Pass., Herbert River Valley.

POA ARCTICA R. Br.
Pleospora magnusiana Berl., (probably saprophytic). Preobraschenie Is; Camden Bay.
Puccinia rubigo-vera (DC.) Wint., Mendenhall Glacier area.
Pythium debaryanum Hesse, in raw soil near Mendenhall Glacier.
Septoria oudemansii Sacc., Mt. Gastineau; Herbert Glacier area.
Spermospora subulata Sprague, Mt. Gastineau

POA COMPRESSA L.
Erysiphe graminis Mérat, Muir's Camp.
Fusarium nivale (Fr.) Ces., Satko Cabin on Herbert River.
Helminthosporium vagans Drechsl., Trail to Mt. Roberts; Juneau.
Septoria oudemansii Sacc., Tlingit Point.
Scolecotrichum graminis Fckl., Muir's Camp; Tlingit Point

POA EMINENS Presl
Rhynchosporium secalis (Oud.) J. J. Davis, Kenai.
Septogloeum oxysporum Sacc., Bomm. & Rouss., Unalakleet.

POA EPILIS Scribn.
Hendersonia crastophila Sacc., Mt. Gastineau.
Septoria oudemansii Sacc., Mt. Gastineau.

POA GLAUCA Vahl
Pleospora infectoria Fckl., (probably saprophytic). Nagai. Cash mentions

that this is a synonym of P. scrophulariae (Desm.) Hoehn. sec Lind and E. Mueller.
Puccinia poae-sudeticae (West.) Jørstd., Happy Valley; Kenai Peninsula; Mt. McKinley Natl. Park; Mile 82 on Glenn Highway.

POA INTERIOR Rydb.
Septoria oudemansii Sacc., Red Mountain.

POA NEMORALIS L.
Puccinia poae-sudeticae (West.) Jørstd., Near Herbert Glacier.

POA LAXIFLORA Buckl.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., Sebree Is.; Tlingit Pt.
Rhynchosporium orthosporum Caldwell, Yankee Basin trail.

POA PALUSTRIS L.
Hendersonia culmicola Sacc., s. f. Eagle River.
Heterosporium avenae Oud., s. f. Eagle River.

POA PAUCISPICULA Scribn. & Merr.
Puccinia poae-sudeticae (West.) Jørstd., Sandy Cove.
Septoria macropoda f. sitadakaensis Sprague, Sandy Cove.

POA PRATENSIS L.
Ascochyta sorghi Sacc., Homer; Mt. Gastineau.
Botrytis cinerea Am. Auct., Sitka.
Cercosporella poagena Sprague, Hoonah.
Darluca filum (Biv.) Cast. on rust. Hoonah.
Erysiphe graminis Mérat, Skagway; Mendenhall; Homer; Circle; Matanuska; Talkeetna Mts.; Fairbanks; Mendenhall Lake; Mt. McKinley; Kotzebue; Beartrack Cove; Hoonah.
Fusarium acuminatum Ell. & Ev., Strawberry Is.
Fusarium nivale (Fr.) Ces., Juneau.
Helminthosporium vagans Drechsl., Homer; Kenai; Curry; Juneau; Douglas; Richardson Highway; Ketchikan; Cordova; Strawberry Is.; Hoonah.
Heterosporium phlei Gregory, Anchorage; Kenai; Homer.
Ovularia pusilla (Ung.) Sacc. & D. Sacc., s. f. of Eagle River; Tlingit Point.
Phaeoseptoria festucae Sprague, Juneau.
Pleospora trichostoma (Fr.) Ces. & de Not., Twelve Mile Summit.
Puccinia poae-sudeticae (West.) Jørstd., Klukwan; Homer; Dunbar; Sitka; Hoonah; Juneau.
Scolecotrichum graminis Fckl. Homer.
Septoria oudemansii Sacc., Sebree Is.

POA STENANTHA Trin.
Ascochyta sorghi Sacc., Red Mountain.
Colletotrichum graminicola (Ces.) G. W. Wils., Sandy Cove.
Darluca filum (Biv.) Cast., on rust. Goose Cove Creek.
Erysiphe graminis Mérat, near Mendenhall Glacier.
Fusarium nivale (Fr.) Ces., Muir's Camp; near Mendenhall Glacier; Red Mountain.
Helminthosporium vagans Drechsl., near Mendenhall Glacier.
Heterosporium avenae Oud., Herbert River Valley; Red Mountain.
Mycelia sterilia, on roots in raw soil. Near Mendenhall Glacier.
Puccinia poae-sudeticae (West.) Jørstd., Valdez; Mendenhall River Valley; Beartrack Cove; Goose Cove; Anchorage Cove; Muir's Camp; Red Mountain; Herbert River Valley.
Pyrenochaeta terrestris (Hans.) Gorenz, Walker & Larson, Mendenhall Glacier area.
Pythium debaryanum Hesse, in raw soil near Mendenhall Glacier.
Rhizoctonia solani Kuehn, near Mendenhall Glacier.
Selenophoma donacis var. stomaticola (Bauml.) Sprague & A. G. Johnson, Steep Creek; Near Russell Is.
Septoria oudemansii Sacc., Muir's Camp, Mendenhall Glacier Area.
Sphaerella graminum Sacc. & Scalia, (probably saprophytic). Shumagin Is.

POA TRIVIALIS L.
Ascochyta sorghi Sacc., Juneau.

Puccinia poae-sudeticae (West.) Jørstd., Steep Creek.
Spermospora subulata (Sprague) Sprague f. ciliata Sprague, Steep Creek.

POA sp.
Urocystis agropyri (Preuss) Schroet., Mt. McKinley Natl. Park.

PUCCINELLIA BOREALIS Swallen
Erysiphe graminis Mérat, Circle.
Pleospora trichostoma (Fr.) Ces. & de Not., Nome.

PUCCINELLIA NUTKAENSIS (Presl) Fern. & Weath.
Puccinia rubigo-vera (DC.) Wint., near Russell Is.

PUCCINELLIA PAUPERCULA var. ALASKANA Fern. & Weath.
Scolecotrichum graminis Fckl., Beartrack Cove.
Selenophoma donacis var. stomaticola (Bauml.) Sprague & A. G. Johnson, Hugh Miller Inlet.

PUCCINELLIA PUMILA (Vasey) Hitch.
Fusarium equiseti (Fr.) Ces., Strawberry Is.
F. nivale (Fr.) Ces., Strawberry Is.

PUCCINELLIA sp.
Puccinia rubigo-vera (DC.) Wint., Juneau.

SECALE CEREALE L.
Ustilago nuda (Jens.) Rostr., mentioned in exp. sta. reports.

TRISETUM CERNUUM Trin.
Mastigosporium rubricosum (Dearn. & Barth.) Nannf., Yankee Basin trail; Satko Cabin on Herbert River.
Septoria calamagrostidis (Lib.) Sacc., Yankee Basin trail.

TRISETUM SPICATUM (L.) Richt.
Darluca filum (Biv.) Cast., on rust. Mendenhall Glacier area.
Fusarium nivale (Fr.) Ces., Mendenhall Glacier area.
Gloeocercospora alaxensis Sprague, Muir's Camp.
Helminthosporium cyclops Drechsl., Red Mountain.
Mycelia sterilia, on roots in raw soil near Mendenhall Glacier.
Puccinia poae-sudeticae (West.) Jørstd., Valdez; Mt. McKinley Natl. Park; Kotzebue; Muir Is.; Anchorage Cove near Mendenhall Glacier.
P. rubigo-vera (DC.) Wint., Talkeetna; Mt. Gastineau; Eagle River; Mendenhall River Valley; Herbert River Valley.
Pyrenochaeta terrestris (Kons.) Gorenz, Walker & Larson, Mendenhall Glacier area.
Pythium debaryanum Hesse, raw soil near Mendenhall Glacier.
Rhizoctonia solani Kuehn (leaf rot), Mendenhall River Valley.
Selenophoma donacis var. stomaticola (Bauml.) Sprague & A. G. Johnson (and ? Metasphaeria culmifida Lind), near Mendenhall Glacier.
S. everhartii (Sacc. & Syd.) Sprague & A. G. Johnson, near Mendenhall Glacier.
Septoria calamagrostidis (Lib.) Sacc., Red Mountain.

TRITICUM AESTIVUM L.
Fusarium graminearum Schwabe, mentioned in station reports.
Tilletia caries (DC.) Tul., Palmer.
T. foetida (Wallr.) Liro, Matanuska.
Ustilago nuda (Jens.) Rostr., Palmer; Matanuska.

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